## Ohio Sea Grant 2012 NSGO Review

Jonathan Eigen



#### **OHSG Management**

- Management staff (Name, position, FTE)
  - Director, Jeff Reutter (.75 FTE)
  - Assistant Director, Christopher Winslow (1.0 FTE)
  - Assistant Director, Jill Jentes Banicki (1.0 FTE)
  - Extension Leader, Frank Lichtkoppler (1.0 FTE)
  - Business Manager, Bryan Ford (1.0 FTE)
- Size of program- Small-Medium



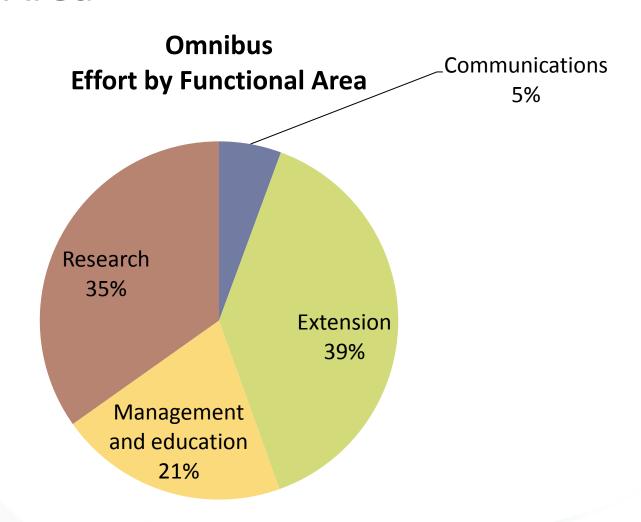
## Ohio Sea Grant Management

Total FTEs on staff (information in Annual report metrics)

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Mgt/Admin	16	.4	9.82
Comm.	5	1.17	2.79
Ext.	12	5.29	4.92
Education	3	.31	.12
Research	21	3.89	.63

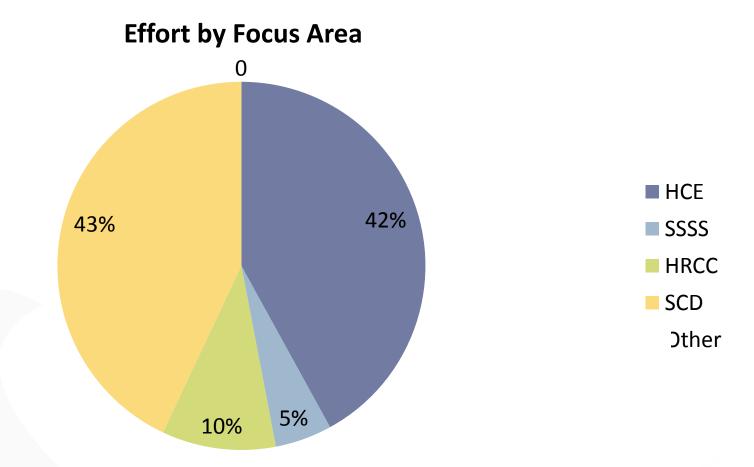


# Ohio Omnibus Core Budget towards each Functional Area





## Ohio Budget towards each Focus Area





# Significant Ohio Changes (since Jan. 2011)

- Assistant Director, Eugene Braig Resigned, 31 Dec.
- Christopher Winslow replaces Eugene Braig, 12 Dec.
- John Hageman, Stone Lab Manager, retired, Aug. 31
- Kristin Stanford hired as Stone Lab Education and Outreach Coordinator, Aug. 1
- Colleen Wellington, Clean Marina Coordinator resigns, 24 June
- Sara Orlando hired as Clean Marina Coordinator, Dec. 5
- Christina Dierkes hired as Outreach Specialist, Nov. 1
- Doris Smith, HR/Financial Coordinator reduces FTE from 1.0 to 0.6



#### Ohio Program RFP Process

- Call for preproposals sent to all Ohio Colleges and Universities and everyone who has submitted a proposal in the past, in March
- Internal/external panel reviews preproposals and encourages or discourages full proposals
- External written peer reviews obtained (minimum 3/proposal)
- Investigators comment on blinded peer reviews
- External panel reviews proposals, peer reviews and investigator comments and ranks and recommends projects for funding. Communication and extension leaders comment on outreach value of each project.
- Director and management team make funding decisions based on dollars available and recommendations of panel.
- Projects can be 1-3 years in duration and begin during the first or second year of the biennium (Ohio is considering moving to 2-year projects to avoid the awkwardness of the 3-year cycle).



# RFP Process for 2012-2013 Projects – Research Metrics

Core Proposals	# of Proposals	# of institutions	# of home institutions	
Pre-proposals submitted	18	8	10	
Full proposals submitted	13	5	8	
Continuing projects funded	6	1	5	
Proposals Funded	5	1	4	



## Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual	Anticipated Target	National Target
НСЕ	Number of acres of degraded ecosystems restored as a result of Sea Grant activities	4	20	
НСЕ	Number of coastal communities who have restored degraded ecosystems as a result of Sea Grant activities	2	2	
HRCC	Number of coastal communities and citizens provided with information in local hazard resiliency, and hazard mitigation techniques, and best practices	20	20	
SCD	Communities engaged in planning activities for making informed development decisions	10	10	
SCD	Communities that have adapted SCD land use planning practices	3	3	

- Charter Captains Gain Business Tools to Lure New Customers and Profits
  - >135 captains attended the Ohio Charter Captain Conference in 2010
    - Conference is designed to strengthen the industry through education in business management and updates on regulations and Lake Erie environmental issues
    - Aforementioned training needs were identified via Ohio Sea Grant charter captain surveys
  - >2/3 of captains report an increase in their bottom line as a result of information learned at one or more of the annual conferences
  - 90% of captains responding to survey reported improving their operation based on information presented at the conference
  - Ultimately, this conference has brought in more money to Ohio's coastal economy and provided a better product for visitors to Lake Erie



- Aquatic Visitors Center Teaches the Next Generation about Lake Erie
  - Ohio Sea Grant and the ODNR Division of Wildlife worked to reopen an historic state fish hatchery/museum
    - OHSG turned the hatchery/museum into their Aquatic Visitors Center (AVC)
  - 12,500 youth and adults visited Aquatic Visitors Center in 2010
    - AVC provided on-the-dock fishing experience and hands-on science education (e.g., microscope work, plankton, and fish identification)
    - AVC provided information about the historic hatchery, Lake Erie food webs, and sustainable sport and commercial fisheries
  - A survey of visitors indicated that they were very likely to:
    - Pay more attention to Lake Erie issues (average 4.23; 1 unlikely, 5 likely)
    - Share information they learned about Lake Erie with others (average 4.34)



#### Sea Grant Partners with University to Coordinate State's Climate Outreach

- In 2009 Ohio Sea Grant with 9 OSU departments created the OSU Climate Outreach Team (led by Sea Grant) to strategically plan climate outreach for state.
- Led by Sea Grant and using survey results for topics, the group developed monthly Climate Webinar Series focusing on regional climate impacts.
  - 225+ people representing 100+ groups attend each webinar, with 90% acknowledging they learned new information and would share it.
  - Webinars have been used by 10 secondary and college courses as teaching tools and website is used as regional resource for natural resources professionals.
- The partnership sparked the creation of multi-disciplinary group of OSU researchers to tackle regional climate-related issues
- To broaden reach, the team partnered with regional entities, including NOAA GLERL, NOAA NERR OWC, Great Lakes Regional Water Program, CDC, and public health departments.



The team is now working with regional and state partners on 5 climate grants

#### Sea Grant Helps Marinas Save Money & Reduce Marine Pollution

- Ohio Sea Grant's Clean Marinas Program provides an opportunity for marinas to voluntarily adopt EPA-approved pollution control practices that help minimize any potential for water pollution.
- As of 2010, the program has 42 Certified Ohio Clean Marinas and 30 pledged marina, which comprise 22% of all Ohio Lake Erie marinas, and encompass over 10,000 boat slips
- In 2007, the program partnered with Mondo Polymers of Marietta, Ohio, to recycle shrink wrap into plastic blocks used to construct highway guardrails.
  - >1.2 million pounds of shrink wrap and greenhouse plastic from over 120 coastal marinas have been recycled into guardrails.
  - Now protecting 225+ miles of Ohio's highways.
- This effort has created jobs in an area outside Lake Erie; saved individual marinas an average of \$700 per year in disposal coasts; and produced a reusable, cheaper product for Ohio taxpayers.
- With help from Ohio Sea Grant, five other states have replicated Ohio's innovative program to recycle their shrink wrap
  - 500,000 pounds has been collected across these five states

#### Ohio Tourism Leadership Academy

- 80% of the 47 graduates have taken on leadership roles, including running for statewide, regional, and local tourism and non-tourism association boards or elected office.
- Two graduates contributed knowledge through articles to industry magazines
- Student awarded Best 30 Under 30 recognition by Destination Marketing
  Association International
- Ohio Sea Grant coordinator of the OTLA recognized as top industry professional
- State tourism division and association incorporating student group projects into state tourism conference
- Group projects, such as a training module for engaging DNR information officers with local tourism industry, are being implemented
- 8.46% increase in student perceptions of responsibility and motivation for civic and policy involvement, a 22.6% increase in their perception of being capable of being leaders, and a 17% increase in perception that their efforts will result in a positive change for the industry



#### **Development of Great Lakes and Lake Erie Literacy Principles**

- Participated in development of Ocean Literacy Principles
- Partnered with Ohio Coastal Management Program, Old Woman Creek
  NERR, and Lake Erie Commission to develop Lake Erie Literacy Principles
  - Lake Erie principles patterned after Ocean Literacy Principles
- Led Great Lakes Sea Grant Programs and Great Lakes Scientists and educators in developing Great Lakes Literacy Principles
- Developed pamphlets for Great Lakes and Lake Erie Principles
- Principles have been well received by NOAA, NSF and NMEA



## 2010 Research Accomplishments

#### **Understanding Harmful Algal Blooms (HABs)**

- Coordinated development of 12 scientists from 9 universities and agencies collaborating on 8 projects.
- Received \$750,000 from USEPA and Lake Erie Protection Fund
- Prepared synthesis report for managers and elected officials
- Dissolved phosphorus (P) loading must be reduced to prevent HABs
- Nitrogen concentration determines which species we get
- HAB species are present in upper reaches of tributaries in water less than 1 foot deep as early as mid-April
- HAB densities in 2011 were 2.5 times higher than ever before
- 2/3 of P comes from agricultural runoff
- Total loading must be reduced by 2/3 to prevent HABs
- HABs float and drift to Central Basin where they contribute to dead zone



### 2010 Research Accomplishments

#### **Understanding Nutrient Loading**

- Loading of total P to Lake Erie as not changed much but loading of dissolved P has increased annually since 1995
  - Now at the levels we had during the 60s and 70s (Dead Lake yrs)
- Once thought that N dissolved and P stayed bound to soil. Now know that dissolved P runs off and is completely bioavailable.
- P loading in 2010 was highest on record until 2011 surpassed it.
- 30% of land already has too much P
- More P runs off land with high soil test P values
- State attempting to implement our recommendations:
  - Eliminate fall and winter application of nutrients
  - Incorporate nutrients into soil, don't broadcast at surface
  - Don't apply more than is agronomically needed
  - 18 research recommendations and many more management recommendations developed
  - Point source loading of P must also be reduced



## Microcystis, Stone Lab, 8/10/10





# Microcystis near Marblehead



